CONSUMERS' Guide

VOLUME IV, NUMBER 22 JANUARY 31, 1938

BREAD BASKET PROBLEMS

CONSUMERS' Guide

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VOL. IV, No. 22 JANUARY 31, 1938

BREAD SPREADS" made the headlines again in January when Consumers' Counsel D. E. Montgomery revealed that "not since December, 1930, has the bakers' and retailers' margin been as large as it was in November and December, 1937. The average retail price of a pound loaf of white bread for the country in December was 8.7 cents and the average cost of ingredients in a typical pound loaf was 2.6 cents. This left an average gross margin of 6.1 cents for bakers and retailers.

"On few occasions during the past 24 years," the Consumers' Counsel pointed out, "has the spread between ingredient costs and retail white bread prices topped the figures of November and December of the year just past."

What January's prices have done to this picture has not been officially reported as we go to press.

For 7 months, from June through December, 1937, the average cost of white bread per pound for the country stayed at 8.7 cents. During this same period the wholesale cost of the most important bread ingredient dropped off sharply. Flour of the kind generally used in commercial bread baking was quoted in December at from 75 cents to $1.25 a barrel below prices prevailing in June, or an average of almost a third of a cent a pound loaf less. Lard and lard substitutes fell off more than 3 cents a pound. Yeast and malt costs remained steady throughout the 7 months. Sugar, salt, and milk costs shaded off, but only slightly.

On the basis of a typical formula for commercial bread, total ingredient costs in a pound loaf of white bread would add up to 2.62 cents in December, as against 2.96 cents in June, 1937, representing an increase in the gross margin of bakers and retailers of one-third cent on the average pound loaf of white bread sold in the country.

Bread prices are reported by the Bureau of Labor Statistics for each of 60 cities. Average prices in 24 cities were higher in December than in June; in 23 cities, they were the same in both months; and in 13 cities, December prices were lower than in the middle of the year.

Contrasted to the steady price of bread, wheat flour sold to consumers at an average of 4.3 cents per pound on December 14, compared with 5 cents in June. Soda crackers also sold well below the June average. Wheat cereal was down slightly. Whole-wheat bread and rye bread, like white bread, remained unchanged at average prices of 9.8 cents and 10 cents per pound, respectively. Pound cake in December sold at more than one-half cent a pound above its June average of 24.8 cents.

Background facts on bread are featured in our first story of this issue which highlights the findings of the Federal Trade Commission study of the economics of wheat.

SHOPPING for food these days," writes a Pennsylvania consumer, "is getting to be an exercise in higher mathematics, it seems to me. Down my street are two stores. At one, they sell dressed roasting chickens for 35 cents a pound. At the other, they sell chickens that are dressed and drawn, and charge 47 cents a pound for them. Now I have sense enough to know that if I buy a chicken at the first store I am going to pay some money for waste which I must remove before I do my cooking. The second store removes that waste, but am I paying more *per pound* for the chicken which the store draws than for the one I draw at home? If so, how much?"

Here's for some more arithmetic, for that's the only way to answer this consumer's conundrum. First get terms straight: A "dressed" chicken is a bird which has been plucked and bled, but with the entrails, head, and feet unremoved. A "dressed and drawn" chicken has had removed the head, feet, and entrails, in addition to being bled and plucked.

A drawn chicken will weigh approximately 25 percent less than the same chicken which has been dressed, only. This is a round figure. The smaller the bird, the larger—usually—is the percentage of weight lost. On a broiler weighing under 2½ pounds, the loss may be as much as 28 or 29 percent of the dressed weight.

Take the round figure of 25 percent. That means for every pound dressed weight for which you pay 35 cents you are getting three-quarters of a pound in drawn weight. Putting it the other way around, for every pound of drawn weight you would have to pay at the same rate, 47 cents a pound. (Multiply the 35 cents by 4 and divide the result by 3.) . . . Suppose dressed chickens are selling for 30 cents a pound. Again by this operation on your cuff, you will find that the equivalent cost of a pound drawn weight is 40 cents.

Of course an easier route to these comparable figures is to get your grocer or butcher or poultry man to do the arithmetic for you. But wise consumers should, if they can, check for themselves!

BREAD BASKET PROBLEMS

More explorations into the Federal Trade Commission's inquiry into the fortunes and misfortunes of farmers and consumers

WHEAT, most staple of foods, has been a persistent source of problems since the first bearded wheat berries ripened red gold in a field of grass on the ancient Abyssinian Plateau. Wheat problem No. 1 today is the distribution of wheat.

Congress, looking gravely at distribution costs, directed in 1935 the Federal Trade Commission to examine into agricultural income from principal commodities, and the Commission selected 6 farm products, among them wheat, to find out what could be done about this ancient, yet modern, riddle.

Investigators for the Federal Trade Commission set to work. They visited country elevators, city elevators, terminal markets, wheat exchanges. They examined the books of milling companies, baking companies, grain brokers, and now they present their findings.

World wheat figures are astronomical. Each month of the year somewhere in the world wheat is harvested. Millions of people work on the total world wheat crop of 6 billion bushels which some 750 million people eventually consume.

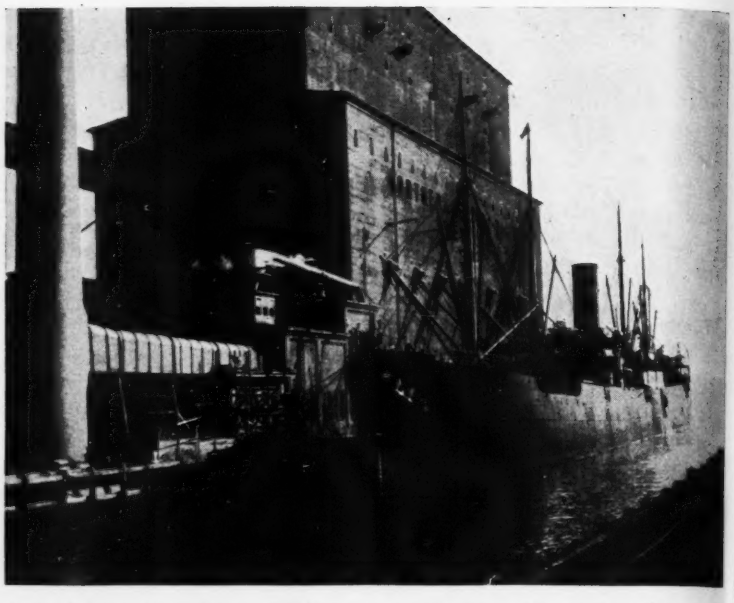
In the world America ranks second in the production of wheat, one place behind the top-ranking Soviet Union. Our total production in an average year amounts to some 800 million bushels, and its value to around $650,000,000. An average crop will cover about 70 million acres, and on its sale half a million farmers depend for their main source of livelihood. Transforming wheat to bread in the United States, gives full time employment to some 250,000 persons other than farmers.

Act 1 in the 4-act drama of wheat

is the production on the farm. In America the stage for this act is set on an enormous T-square which has, as its perpendicular, a broad strip of land from Ohio to Kansas, and as its top bar another broad strip of land from Texas to the Dakotas. Other areas in the United States produce wheat—the Plateau of the State of Washington, Oregon, and Idaho, and many other States, but the great T-square is America's bread basket and, to a small extent, the world's bread basket. Eighteen out of every 100 bushels of American wheat are grown in Kansas, America's No. 1 wheat State. From North Dakota come 10 out of every 100 bushels; and from Washington, in the far West, come 6 out of every 100 bushels.

Commercially-grown wheat in the United States falls into 5 principal classes. Hard red spring wheat—used for bread flours—makes up 16 percent of the total American wheat-producing acreage. This wheat ripens on the plains of the Dakotas, Minnesota, and Montana. From this same area comes Durum, the macaroni wheat. Five percent of American wheat is of this variety. Hard red winter wheat which grows in Kansas, Nebraska, and Oklahoma supplies a bread flour. East of this wheat belt, is the soft red winter wheat region, which stretches from Eastern Kansas to the Atlantic Coast. This wheat is used chiefly for the manufacture of pastries, crackers, biscuits, and bread flour for home baking. White wheat, the fifth variety, takes up 12 percent of the space in the American bread basket. It is grown chiefly in the far West, though some of it is grown in Michigan and New York.

For each bushel of seed planted the farmer expects to harvest from 10 to 20 bushels of grain. Modern wheat harvesting is as thoroughly mechanized as a factory. In fact, a modern wheat combine is a factory that moves up and down the rows of rich ripe grain cutting off the heads of wheat, threshing it by means of mechanical knives, winnowing it by mechanical blowers and shakers, and then delivering the wheat berries to wagons alongside the factory by means of chutes. To produce 100 bushels of wheat—including the time required before harvesting and in harvesting—it now takes an average of 49 hours of one man's time. Fifty years ago the job with machinery of the time, required 129 hours.

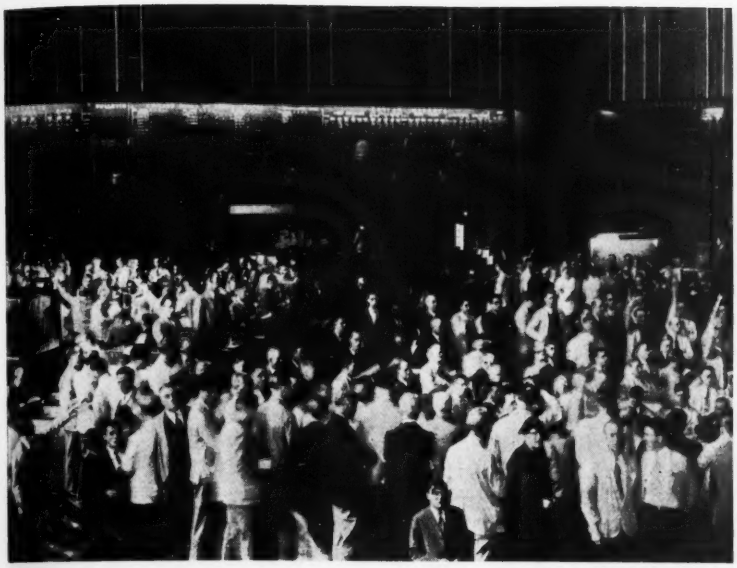


Second largest producer of wheat, in good years this country ships many millions of bushels abroad. Ordinarily the price which American farmers have received for their wheat, whether sold at home or abroad, has moved up and down with prices of wheat produced throughout the world

Second act in the drama of wheat is the transportation and marketing of the grain. The harvested ripe grain is loaded into wagons or trucks by the farmers and hauled to the country elevators. There it may or may not be cleaned and graded. The farmer may sell his wheat on delivery or it may be held at the elevator for future sale. The elevator sends the grain to centers like Minneapolis, Kansas City, or Chicago. While part of the wheat is likely to be milled without further ado, some of it is taken out of freight cars, put into huge elevators and held there although ownership of the wheat may change hands a dozen times or more. Finally, the wheat is loaded again into freight cars or cargo boats and shipped perhaps to an Eastern mill, perhaps abroad for bakers of foreign breads.

Nerve center of the wheat system, source of the impulses that move wheat around the world, is a great oak paneled room in the Chicago Board of Trade. Here, beneath huge blackboards chalked white with wheat prices, in a room 5 stories high, 165 feet long, and 113 feet wide, is the wheat pit. The wheat pit is an actual pit, an 8-sided well surrounded by a solid teakwood wall, into which brokers enter, first by walking up 4 steps and then by walking down 7 into the well itself.

Trading begins at 9:30 in the



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Nerve center of wheat economics in this country is this great oak paneled room in the Chicago Board of Trade where a sale, indicated by a twist of the hand, becomes a marching order for some quantity of grain to move from elevator to mill

morning when several hundred men in tan jackets crowd together and begin to call to each other, wave their hands, jot down notes, nod, and then finally signal the sale or purchase of wheat. A palm facing toward the body indicates an agreement to buy. A palm facing out indicates the seller's agreement to sell. The price is indicated by the fingers. Over head, on a narrow cat walk, around 3 sides of the huge room, agile young men mark up the blackboards recording the sales.

Grain on the wheat market is either cash grain or futures grain. Cash transaction involves grain for immediate delivery. At one end of the trading room samples of this grain in long paper bags are spread on a double row of tables. Buyers examine the samples, cogitate on them and then, as particular samples satisfy, buy them. The sales then become marching orders for carloads of grain to move toward a mill, elevator, or export.

Futures grain is grain purchased or sold for delivery at some specified month in the future.

Before the Civil War, favorable weather sometimes filled Chicago's harbors with grain vessels at times when there was no grain in Chicago. Delays in finding cargoes cost owners money. To insure themselves against losses through such delays, by 1848 the men who owned and chartered grain boats, began to buy grain on a "to-arrive" basis for delivery on a specified date. On that date if the seller could deliver the grain, well and good; but if he could not deliver grain from his own supplies he had to go out and buy some to make good on his contract. In this case, if the grain he purchased for delivery cost more than the price he had contracted to receive, he lost money. If it cost less, he made money. From this situation then arose an opportunity for speculators to risk their judgments in the hope of profit on the movements of grain prices. Wheat futures became a perfect instrument for speculation.

Legitimate grain merchants and millers, however, are not speculators; they want grain for processing on certain dates. To protect them from the hazards of price movements, a device called "hedging" has come into use.

Suppose, for instance, a miller will need a thousand bushels of wheat at the end of six months. To insure the delivery of this wheat at that time, he places an order today for the wheat to be delivered at the end of six months, contracting to pay the current price of futures wheat, say, $1.00 a bushel. However, if during the six months wheat falls to 90 cents a bushel, this miller will have to pay 10 cents more for every bushel of wheat than his competitors.

Not wishing to chance a loss, and not interested in the speculative gain which would occur if the market went up, the miller therefore, hedges. At the time he places his order for 1,000 bushels at $1.00 per bushel, he also contracts to sell 1,000 bushels of wheat which, let us assume, is at the same price. Then, if wheat drops to 90 cents per bushel the miller buys wheat to make delivery on the 1,000 bushels he has promised to deliver at $1.00 a bushel or, as is more frequently done, he settles at the market price. Net result on this transaction is a profit of 10 cents per bushel. But, at the same time he also takes delivery on the wheat he has promised to buy for $1.00 a bushel for milling. Net result on this transaction is a loss of 10 cents per bushel at current prices. Balancing the two together, the miller comes out even—he has neither gained nor lost. For this insurance against price change to protect his regular trading margin, he has only to pay brokerage fees.

Hedging is intended to protect the miller's (or grain trader's) gross

profit. Theoretically at least the hedge insures the cost of the grain element in his manufacturing costs.

To be able to buy and sell whenever necessary, the miller must have a market where there are persons who are always willing to buy when he wants to sell, or who are always willing to sell when he wants to buy. In the wheat futures market speculators help to perform this service, enabling grain men to hedge. Thus, say the defenders of the grain futures market, speculation is justified.

Pretty theories, however, do not always work out as well in practice as they do in syllogisms. Looking at the grain futures market, the Federal Trade Commission came to the following conclusions.

The theory will work in a perfectly competitive market where no one is able to manipulate prices, in a market which is open to everyone, and in a market around which no restraints are thrown. Lacking these conditions, strange things can occasionally happen in a wheat futures market.

One example of what can happen is cited by the Federal Trade Commission. In April, 1931, speculators began to buy corn for July delivery. By June 30 they had purchased 8½ million bushels of corn, had jammed up all the facilities for storage in Chicago to such an extent that some corn had to be stored in boats on Lake Michigan. On delivery day those persons who had contracted to deliver corn were unable to buy corn in Chicago to make their deliveries. Up went the price of corn as they bid for it, 14 cents in three days. Then, delivery time over, and all speculative debts settled, the price of corn came down again, faster and farther.

Net result of this extravaganza, except for the gains and losses of speculators, was to concentrate in Chicago millions of bushels of corn which could not be used there, and which took a year getting back to the normal channels of distribution.

To eliminate the objections to the grain futures market, the Federal Trade Commission says, large speculators must not be permitted to trade in grain for purely speculative purposes in inordinate amounts.

Delivery on grain on futures contracts according to Board rules must be made in Chicago but, says the Federal Trade Commission, if a speculator ties up all the facilities in Chicago, artificial price manipulations can result from the corner. Pointing to cotton the Federal Trade Commission says, cotton may be delivered on New York futures contracts at any one of several southern cotton markets. Thus by a similar device the necessity for the shipment of wheat to Chicago could be limited, and at the same time, the manipulation of futures prices could be prevented.

Next grain problem considered by the Federal Trade Commission was the ownership of elevators. Since most farmers' grain is sold in a 4-month period, though the grain itself is used over a 12-month period, those grain dealers who control storage often are in a position to dominate and control many phases of the marketing of grain. The recognition of the importance of storage has led to many State and Federal laws regarding grain elevators.

Prior to 1890 railroads built ele-

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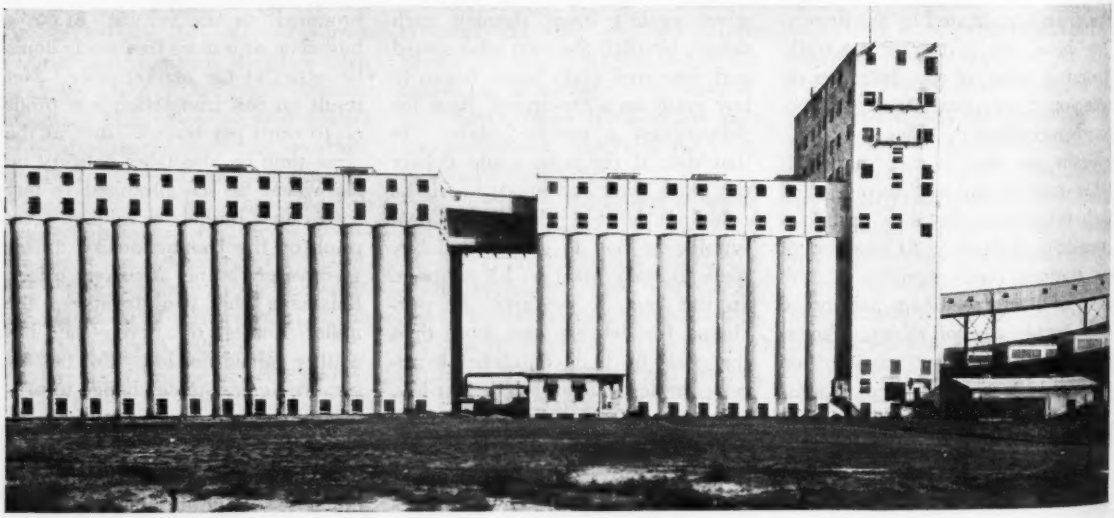
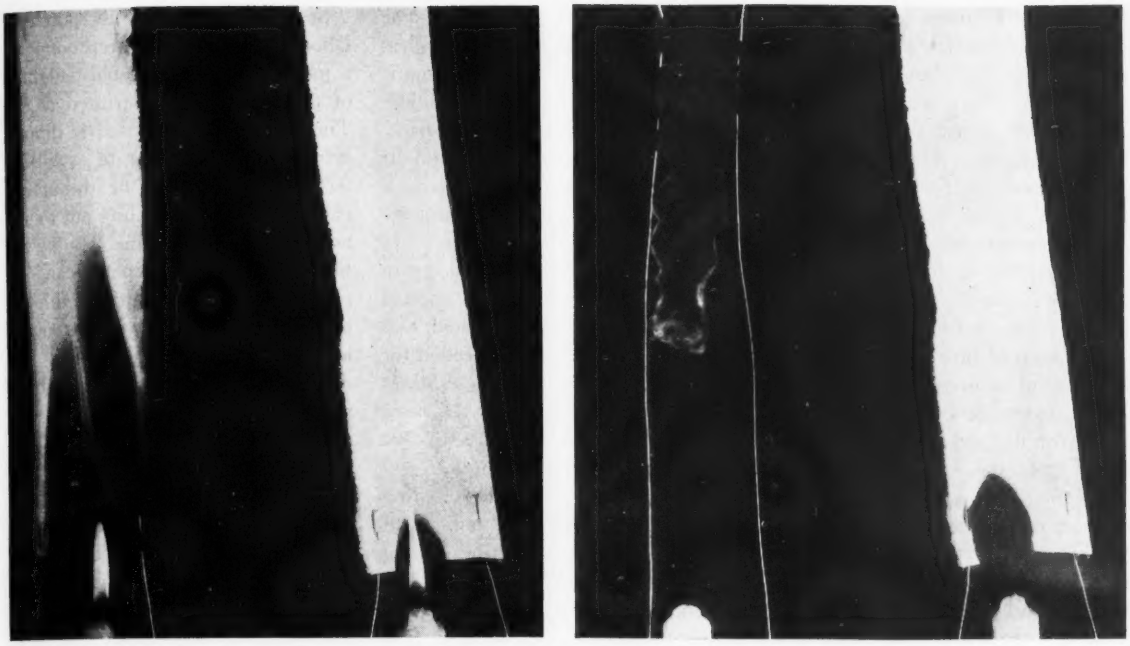
Since most wheat is produced in a 4-month period but is needed over a 12-month period, storage facilities and financing are major problems in wheat distribution. Who controls them and how, are questions scrutinized by the Commission's experts





Fireproofing will not prevent a fabric from charring, but it will halt the spread of the flames. These pictures show how untreated and treated strips of cotton cloth looked after they had been burning for 20 seconds (left) and for a minute (right)

An Ounce OF PREVENTION

ASK ANY fire chief what the main cause of fire destruction in the home is. Chances are he will have a single answer: carelessness. But that is only half the story. The millions of dollars of property losses in the home which annually go up in smoke are due as much to lack of *prevention* as to carelessness.

No accurate estimate has been made of the value of home property turned to ash annually as a result of fire. Roughly—very roughly—experts say that about half of the approximate $350,000,000 fire toll every year represents losses of private homes and property. No matter what the figure is, it does not measure the toll taken in family happiness and security. But the toll can be lessened by fireproofing, a process both inexpensive and simple, and a safeguard against the constant threat of fire wiping out in a few hours the home and investment in that home which might have taken years to build up.

A doctor, seeking to prevent disease, first finds the cause of that disease and then looks for a way of eliminating the cause. Similarly, fire-prevention means checking the cause of fire at its source by eliminating the chance of fire from the first. It is here where fireproofing is important. Many fires in the home find their source in the kitchen, where a curtain by an open window may blow into a gas flame, or an overheated iron may cause an ironing board cover to burst into flame, or a hot stove might ignite a pot lifter. Others start in other parts of the

Fireproofing is one way to cut the cost of clothes and fabrics, and to safeguard the home against major losses from minor calamities

house, near an open fireplace where rugs and draperies alike are constant fire hazards, or near electric heaters—in short, anywhere where inflammable fabrics are exposed to heat and flames. It is these fabrics which must be fireproofed if the home is to be safeguarded adequately against fire.

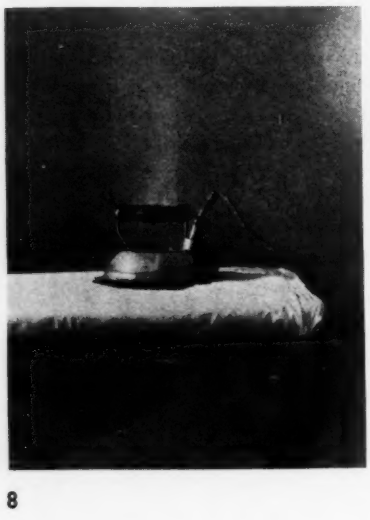
Fireproofing cloth and other material is simpler than doing the family wash and can be done with a minimum of time and trouble. As a basic aid to fire-prevention in the home, every housewife (and husband, for that matter) should know these processes. They should be their own fire wardens within the confines of their home and family.

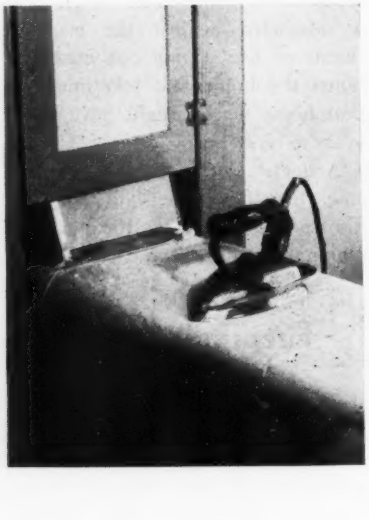
Giving a fireproofing treatment to a fabric can do one of two things: It can smother a fire starting in the fabric by surrounding the flame with non-combustible gases; such a fireproofing agent acts in the same way as do carbon tetrachloride and carbon dioxide used as basic chemicals in fire extinguishers. Or it can melt and "seal off" the fibers of the treated fabric, preventing the flames from gaining any headway. Only partly responsible for checking the flames is this "sealing action." The melting of the fireproofing chemical by the heat results in the automatic operation of a miniature "sprinkler system" within the fabric itself. Moisture in the chemical is given off in the form of steam and acts as a partially effective defense against the flames.

It is this second type which can most easily be prepared and applied in the home. Borax, boric acid, and hot water are all that are needed for the amateur kitchen chemist. Seven ounces of borax, 3 ounces of boric acid powder, and 2 quarts of hot water comprise the formula for a good supply of the fireproofing liquid. The borax and boric acid are merely mixed into the heated water until a clear solution is obtained. Powdered boric acid will dissolve more readily if it is first made into a paste with a small quantity of hot water.

This so-called "borate solution" has been found by laboratory explorers to rate high for use on fabrics. Any drug store sells the chemicals which are so harmless that the careful housewife need fear no injury to her hands.

A few minutes after the picture on the left had been taken, the smouldering ironing board cover was in flames. Fireproofing the cover eliminates this common fire hazard, as the right-hand picture shows





Step number two in this kitchen-laboratory method of fireproofing is a job that the ten-year old daughter of the family can be trusted to do. The article to be treated is dipped into the warm borate solution, wrung out by hand or through a clothes wringer, and hung out to dry on the family wash line. Bulky articles—draperies, carpets—can be sprayed with the solution with an ordinary garden sprayer. Convenient for some housewives is the method of sprinkling the fabrics with the solution, instead of with water, before they are ironed. Though effective when done correctly, this method will fail of success unless care is taken to see that the fabric is well saturated with the solution. The fabric should be nearly dry before it is ironed, and then only a moderately hot iron should be used on it. Failure to do this will result in the borax in the fireproofing solution sticking to the bottom of the iron and interfering with the movement of the iron. If that happens, the borax can easily be removed by wiping the bottom of the iron with a wet cloth.

New fabrics that are heavily sized and water resistant do not absorb the fireproofing solution very readily; the solution coagulates and "bunches together" in small drops. A "wetting agent" mixed with the solution will get around this difficulty by spreading the fireproofing liquid evenly over the texture of the material. Powdered or flake soap mixed with the solution until suds are formed will usually suffice. A wetting agent similar to those used in commercial dyeing will be a satisfactory substitute when soap is made ineffective by hard water or when it leaves a visible film on drying. A small quantity of such a wetting agent—about one-fourth of an ounce to a gallon of solution—will do the trick. Firms handling dyers' supplies are the best places in

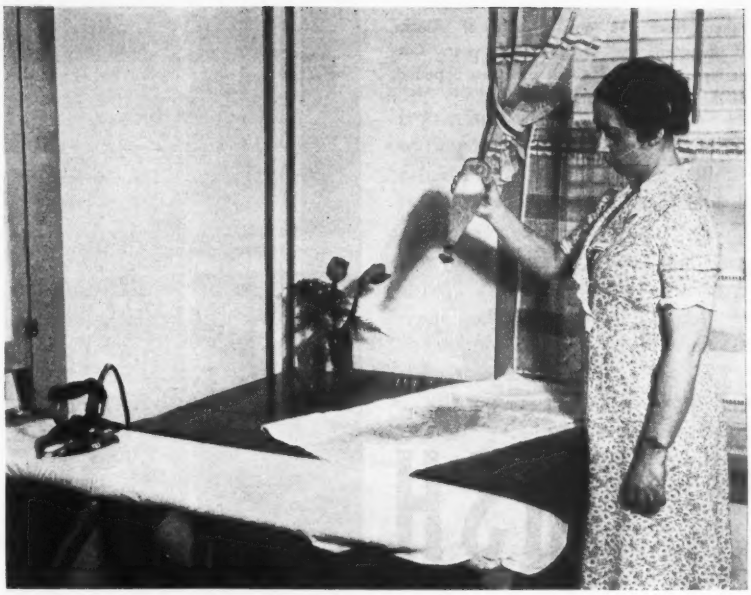
which to buy the wetting agents.

With the borate solution and with other types of fireproofing solutions, care should be taken to see that the fire resistance of the fabric after drying is satisfactory. Best way of doing this is to treat scraps of material similar to the garments or other cloth articles which are being fireproofed. A flame applied to the dry scraps will be a ready clue to the fire-resistance of the treated articles.

What should be fireproofed? Cotton fabrics stand at the top of the list. After them come children's play suits, cotton rag rugs in front of an open fireplace or near a stove, curtains and draperies near flues and open fires, ironing board covers and kitchen pot lifters, fabric screens in front of fireplaces, fabric panels that hide wood or coal for the fireplace, fabric heat deflectors for stoves, and—as a reminder that the yuletide season can be one of tragedy as well as one of joy—trimmings for Christmas trees which so often cause a Christmas happiness to be turned into horror.

Very few fire proofing methods are lasting. Laundering, exposure to the elements, rain, all result in the diminishing of the resistance of the treated article to fire. Some fireproofing agents, such as tin oxide, are not affected by rain or weather, but the complicated process of treatment makes it unwise to attempt use of these agents in the home. For that reason the fireproofing process should be repeated after washing or exposure to bad weather.

This age of modern methods of home insulation, air conditioning, and automatic oil heat is a far cry from the old fashioned practices of insulating with loose cotton and sawdust. But even today many homes are kept warm with sawdust spread over unfinished attics to prevent heat losses through the ceilings of the rooms below, or with cotton packed tightly in wall and floor



Dampening unironed fabrics with fireproofing solution, instead of with water, is a wise precaution. The fabric should be well saturated with the liquid and then allowed to become almost dry before ironing with only a moderately hot iron

cracks. Here again fireproofing is important. For adequate protection against a disastrous fire getting a head start in one of these highly combustible materials, they should be treated with any one of three simple chemical solutions before they are used for insulation.

The first is made by dissolving one pound, 9½ ounces of ammonium sulphate in a gallon of water. The

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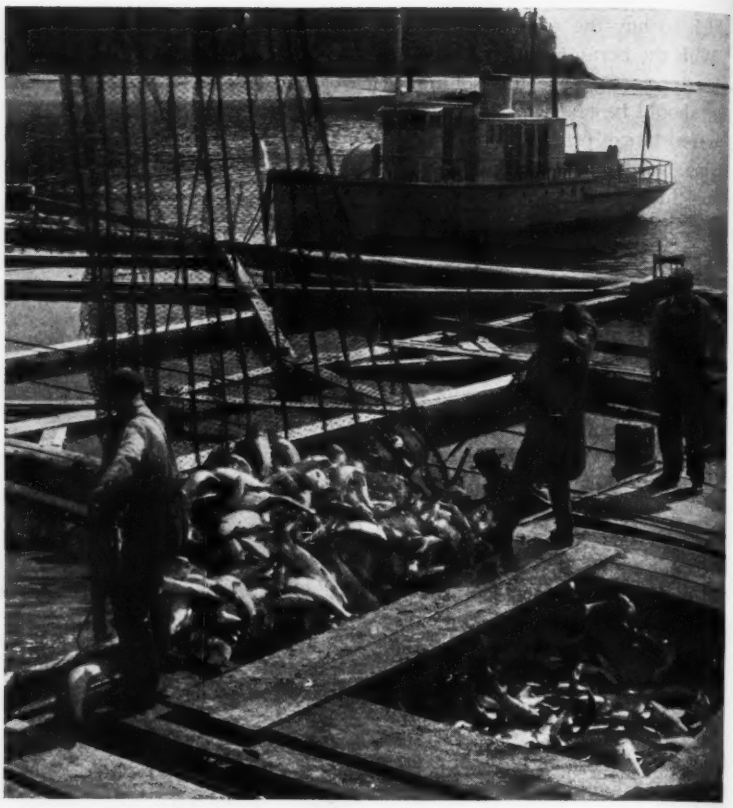
Over half a billion pounds of salmon are fished from the cold waters of Alaska, Washington, and Oregon each year. Canneries claim about 4 out of every 5 pounds of this enormous catch



FISH on Your Diet

AMERICAN fisheries were important even before this nation was born. European fishermen—French, Portuguese, and English—had been sailing every year to the Newfoundland banks to fish for cod before the first white settlements in North America.

Cabot in 1497 brought back from his voyage the report that in the waters off Newfoundland "the sea is covered with fishes."

In the year Sir Frances Drake set out to girdle the globe, 300 ships sailed from European ports to fish for cod in American waters. Descendants of Drake and Cabot settled in New England, among other reasons, to get closer to fisheries and to have a nearby landing place for drying and salting the cod.

Fish had long been a concern of English statecraft. Writing in 1549 on "Policies to Reduce this Realm of England unto a Prosperous Wealth and Estate" an English writer had declared ". . . it were very requisite that there should be as much fish spent in the realm yearly as was wont to be heretofore, for else will fish and other victual also rise to an unreasonable price. And surely there is nothing that will sooner move the people unto sedition than the dearth of victual."

The New England fisheries are the oldest commercial enterprise in the whole country. Exploited for over 400 years, New England's fisheries still produced 655 million pounds of fish during 1935—about one-sixth of the total American catch; and the time-honored cod accounted for 120 million pounds.

Great is the variety of American fishes and cod is no longer king. Our 160 common species of food fish—to mention only a few—include the salmon, which the Indians used to hunt with bows and arrows, spears, and traps; the glittering, iridescent mackerel; the Maine herring, canned as the sardine; the plentiful pilchard of the Pacific Coast, likewise known in its canned form as the sardine; the fat river catfish or bullhead with spikes and feline whiskers; the trout beloved by sportsmen; the great flat halibut which flourish in the colder oceans.

Our colorful American speech gives many different names to the same fish. The Norfolk spot is the

Facts you should know when you buy fish

"goody" in New Jersey, the "chub" at Charleston, South Carolina, the "chopa blanca" at Pensacola. That gamy food fish known to New England and the Middle States as the bluefish, is the "tailor" or the "greenfish" to Maryland, Virginia, and North Carolina; the "skipjack" south of Cape Hatteras; and again the bluefish in the Gulf of Mexico. A sea trout from Chesapeake Bay becomes a "weakfish" if it swims north to the Jersey coast.

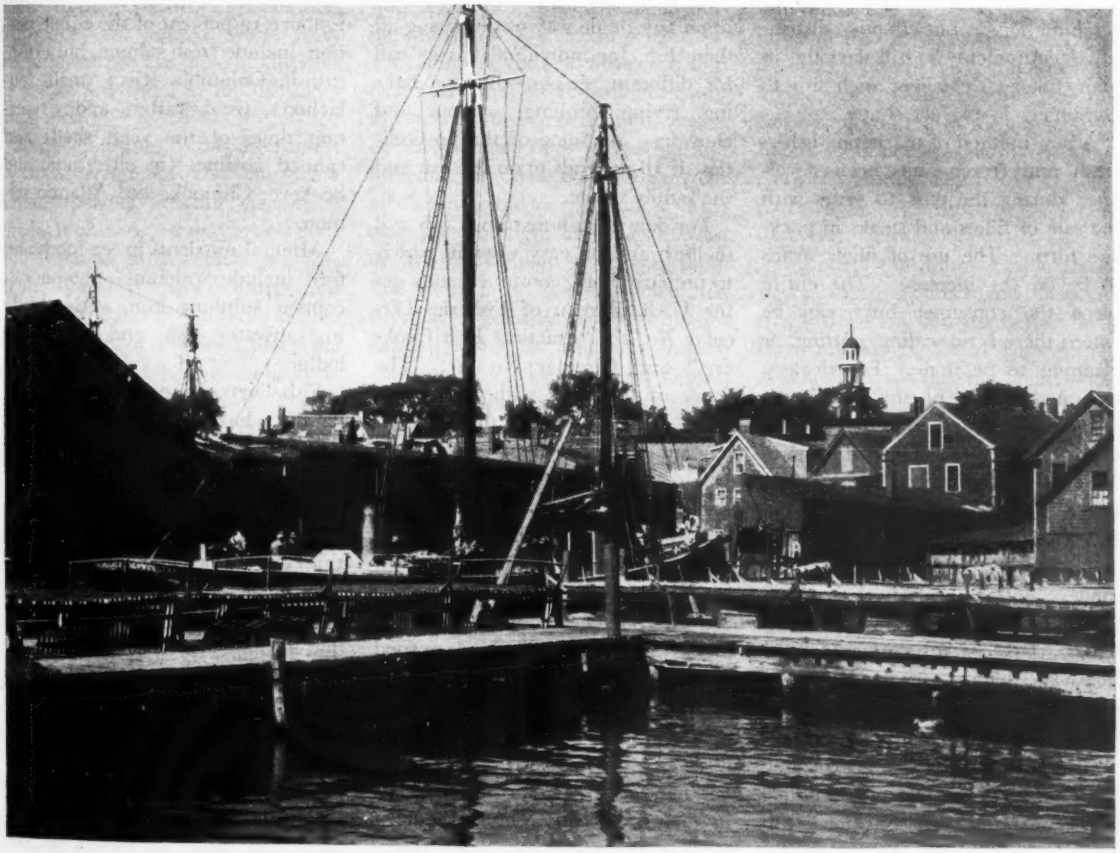
Variety in species of fish presents the shopper with a harder problem than is the case with potatoes or oranges. We may live near vegetable gardens or orchards, but the only time most of us see the denizens of sea and stream is when we go to fish market. "It would be extremely difficult, if not impossible for the average housewife to learn to identify all the various species of edible fish as they appear in the market," says a Bureau of Fisheries technologist. "This should not be necessary where the dealer is reliable."

Recognizing freshness is almost as hard as recognizing species. Fish and shell fish have a delicate structure, in which chemical and bacteriological changes take place more rapidly than in any other food. They spoil easily if not handled with care. Fresh fish must be well iced to be protected from spoilage and contamination.

First rule to observe in buying fish is to be sure that the flesh is firm and rigid, and does not yield to pressure of the finger. If a whole fish is being bought, the eyes should be bright and not sunken; the gills should be free from great discoloration or suspicious odor; the scales should cling to the skin, and not come off too easily. Consumers should not buy fish which they suspect of being tainted.

Fresh fish should be kept cold until prepared for the table. Before putting fish in the refrigerator, however, wrap well in waterproof paper.

Along the waterfront at Gloucester, Massachusetts, one of the important centers of New England fisheries which are the oldest commercial enterprise in the country and still account for about one out of every 6 pounds of the country's total catch each year



Absolute essential is keeping fish cold from the time it is caught until it is prepared for the table. Marks of fresh whole fish are: flesh, firm and rigid; eyes, bright not sunken; gills, free from discoloration or suspicious odor; scales, clinging to skin

Fish which is frozen and kept in cold storage remains in good condition for months. New quick-freezing processes give the best results in retaining flavor, but effective distributive equipment is still lacking in many places to deliver such fish to consumers in perfect shape.

A new method of marketing fish—fresh and frozen—has been developed during the past 10 years with the sale of fillets and steaks in package form. The use of fillets seems to be on the increase. The entire piece the consumer buys can be eaten; there is no scaling, gutting, or cleaning to be done. For dealers, shipping weight of the fish is reduced. The waste, which is usually about 50 percent of the whole fish, remains in the hands of the producer, who can use it for the production of meal and oil.

To vary the menu and save money, Bureau of Fisheries experts say: Look to some of the less common varieties of fish, instead of the relatively higher-priced staple sea products. Local fish markets along the coasts, and often inland, offer many varieties. Hake and mackerel, red snapper and grouper, channel bass and California sardine (pilchard), crab along the South Atlantic coast, and the burbot of the Great Lakes, are a few that beckon to the enterprising and thrifty housewife. But she should not rely upon any single way of preparing all these fish, for individual flavors call for different recipes. Boiling, baking, frying, broiling, scallops and chowders, are some of the possibilities; it all depends upon the fish and the family's taste.

For details on how to buy fish and shellfish and on easy ways in which to prepare them, consumers may get the U. S. Bureau of Fisheries Circular No. 19, "Practical Fish Cookery," and Circular No. 21, "The Story of Oysters," with 35 recipes. (Five cents each from the Superintendent of Documents, Washington, D. C.)

Helpful shorter bulletins which may be had, free of charge, from the U. S. Bureau of Fisheries, Washington, D. C., include "Look to the Sea for Your Diet"; "Nutritive Value of Marine Products"; and a food chart, "Fish and Shellfish for Food."

Many essential nutritional elements are provided by fish and shellfish: protein; fat (in certain fishes); Vitamins A, B, D, and G; minerals in quantity and variety. Flesh of most of the commonly eaten fish—halibut, cod, whitefish, salmon, trout, pickerel, and perch—averages from 15 to 18 percent protein.

Fat fish, in which the fat content is above 10 percent of the edible portion, include fresh salmon, butterfish, catfish, Columbia River smelt (eulachon), trout, turbot, and, at certain times of the year, shad; and canned sardines (in oil), tuna, and Sockeye, Chinook, and Atlantic salmon.

Mineral nutrients in sea foods and fish include calcium, phosphorus, copper, sulphur, iron, and—chiefly in saltwater fish and shellfish—iodine.

Fish liver oils, especially cod and halibut, have recently come into prominence as sources of Vitamins A and D to combat the "deficiency diseases."

Experts say that each person in this country eats about 13 pounds of fish each year. But nationwide averages mean little, when we know that people in New York City get about 32 pounds of fish per person per year and people in inland cities average much less. In St. Louis, for instance, the average is only 9 pounds; in Louisville, Kentucky, 6 pounds per year. Within a city, too, there are large differences in the

amounts of fish eaten by individual families. Except in fishing communities, low income families do not generally enjoy much fish because the food dollar has to go first for foods highest in energy value, without regard to the "protective" value of fish proteins, minerals, vitamins.

America rates low in the list of fish-consuming countries. Japan has the highest figure with 55 pounds of fish and shellfish per person. Then come Sweden with 52 pounds a year; Norway, with 44; Denmark, 39; Portugal, 37; England and Wales, 35.

Fish consumption, according to many authorities, may increase in this country during the years ahead of us. But it is not likely to reach any such figure as that for Japan, the Scandinavian countries, or England. In these countries grazing and crop areas are limited, while fresh sea products are available at all times to people anywhere in the country's small area.

Large quantities of fish are caught by local fishermen and consumed without passing into the customary channels of trade, so that figuring out how much we catch each year is difficult. For the United States and Alaska, most recent estimates by the U. S. Bureau of Fisheries place the year's catch of fish and shellfish at over 4 billion pounds, worth 80 million dollars to 125,000 commercial fishermen. About three-fourths of the catch is sold for human consumption; the rest goes into by-products.

Canned fishery products amounted in 1936 to 795 million pounds, valued at almost 95 million dollars. Varieties, in order of value of the pack, were: salmon, far in the lead; tuna; sardines; shrimp; mackerel; clams; oysters.

Packaged fish, in the form of fillets and steaks and shellfish (fresh and frozen) in 1935 were valued at 25 million dollars; cured fish products were worth 15½ million dollars.

Fishery by-products manufactured in 1936 were valued at almost 35 million dollars. Most important were fish oil, used chiefly for soap; and fish meal for animal and poultry feed and fertilizer.

Pioneering days are over in agriculture and forestry; the fisherman remains in many ways our last frontiersman. He is still engaged in hand-to-hand combat with nature. Despite the introduction of power vessels, hundreds of sailing vessels still go out of our ports each month to battle the elements in search of a living from the uncertain seas.

Division of the proceeds of the catch is still by shares. Only hired men in the fleet are the cooks. The other men, the captain, and the vessel itself, work on a share basis. The wage system has penetrated the fishing industry only in small part.

Farmers of the sea, fishermen find that individual effort does not count for much when seasons and storms on the one side, and marketing and financing practices on the other, cut off their nominal independence. Fish may pass through the hands of four or five middlemen on its way from the producer to the consumer. In these arrangements, says a Fisheries Bureau expert, the fisherman "has no control and less legal protection than is afforded the farmer in the marketing of farm products."

Difficulties in obtaining needed credit for current operations are enhanced by the fact that ships and floating equipment are not considered good collateral, in commercial banking. The fisherman depends on outside financing from local wholesale shippers, wholesale receivers, commission merchants, and producers; often he rents his boat from a canner; and he must sell where he gets his financing. Testimony before the House of Representatives Committee on Merchant Marine and Fisheries last year by a Department of Commerce economist declared that "just so long as the fisherman is unable to exercise freedom to sell his fish to the best advantage—just so long will we fail to merchandise fish in an orderly manner."

The livelihood of the men who catch fish is at the mercy not only of seasons, weather, and their creditors on land. Almost all fish—and fishermen—must compete with each other for the consumer's food dollar, since consumers may readily substitute one variety for another. Many kinds of fish, especially certain edible species such as the cod and mackerel, move in "runs" or "schools." They must be caught when they are found and where they are found. As a result, there are frequent gluts on the market when large catches are brought in. Prices then drop to the fisherman, but not, as a rule, in the same degree to the consumer. On the other hand, "any enhancement in the price of fish occurs after the fish has passed out of the fisherman's hands." Concentration of demand for fish around the end of each week makes these price drops to the fisherman even sharper.

To offset the unpredictable workings of supply and demand, cooperative production and marketing have been attempted, as in agriculture, although to a somewhat smaller extent. Some 130 fishermen's cooperative associations were recently recorded by the Bureau of Fisheries. Fifty-four associations selling fish and buying supplies for their members, did over 9 million dollars' worth of business in 1935. Members and crews of these associations numbered 12,500 fishermen. Investment in boats by members amounted to $20,700,000; investment in fishing gear was about $3,600,000. The Pacific Coast has seen chief development of these cooperative associations; others operate in the Atlantic and Great Lakes fisheries.

[Continued on page 18]

Hands on the Bottleneck

Economic scouts penetrate into the mystery zone of milk distribution and emerge with new facts about the handlers of this essential food on its way from producers to consumers*

NEAPOLITAN milk consumers who get their milk warm from goats that walk into their kitchens need never bother themselves about distribution problems. There the economics of distribution are ideally simplified into a triangle, goat, goat-owner, and consumer. And unless the goat eats the money the consumer pays, the goat owner gets it, and no economists need go hunting up and down the country tracking down pennies in the consumer's dollar.

American city consumers, however, never see the cow whose milk they drink, they don't know the owner of the cow, and as for the consumer's dollar it takes an economic Sherlock Holmes to find out who gets it.

Instead of a goat in his kitchen, the American consumer has a corporation on his doorstep. A goat can be seen, smelled, and touched, but a corporation is intangible; it has neither shape, smell, nor touchable substance. Anyone can describe a goat, but describing a corporation is a job for a trained economist. Federal Trade Commission economists have recently described a few of the corporations in the business of milk.

America's biggest milk corporation is said not to handle a drop of milk, though its subsidiaries are important handlers not only of fluid milk but also of cheese, ice cream, and other milk products. This No. 1 milk corporation of America got where it is today chiefly by purchasing 331 separate dairy companies. Through these companies it sometimes acquired control of other companies. In one case the purchase of one dairy company brought control of 50 others. Besides the 331 dairy companies it also purchased or organized other companies to operate its cold storage plants, to advertise its products, and to run its trucks and tank cars. Beginning with 2 companies in 1923 milk corporation No. 1 started to grow immediately; it bought 9 companies in 1924, 31 in 1925, 6 in 1926, and 4 in 1927. Suddenly in 1928 its arm reached out and gathered in 62 companies; 98 were added in 1929, 81 in 1930, and then, its grasp less reaching, it added unto itself only 23 in 1932, and 11 in 1933. Consumers buy milk with money. They put down from 9 to 16 cents

**Earlier sections of this series, "Milk for Millions," appeared in the August 9, August 23, September 6, October 18, November 1, and November 15, 1937, issues of* CONSUMERS' GUIDE.

on the grocer's counter, receive a quart of milk in exchange and the sale is complete. But corporations approach the problem of buying and selling each other differently. For instance, milk corporation No. 1 purchased most of its 331 dairy companies by exchanging its common stock for the stock of the companies it wanted to buy. The owner of a dairy company would turn over his company to the No. 1 milk corporation together with a promise not to engage in the dairy business again. In return for this he would receive a block of stock in the No. 1 milk corporation and a job running his own dairy company at a salary of anywhere from 5 to 50 thousand dollars a year.

Piling up companies like this results in piling up power in the milk business. By these methods the No. 1 milk corporation acquired control by 1934 of 21 percent of all the ice cream sold in the United States. But that is only part of the story. Control of almost one-fourth of all the ice cream in the United States meant that in Connecticut and Vermont the No. 1 milk corporation controlled 50 percent of ice cream sold, 40 percent of the ice cream in Maine, New Jersey, North Carolina, Virginia, and the District of Columbia.

Consumers in Kentucky, Massachusetts, Michigan, New Hampshire, Pennsylvania, and Tennessee bought 30 percent of their ice cream from the No. 1 milk corporation, and one-fifth of all the ice cream sold in New York, Ohio, Illinois, and Wisconsin came from this company. Milk corporation No. 1 sold ice cream in 27 States altogether.

Cheese, most highly concentrated of foods, is also the most highly concentrated economically. One-third of all the cheese sold in the United States in 1934 was marketed by the No. 1 milk corporation.

Almost 10 percent of all the milk sold by farmers in the United States passes through the bottleneck of the No. 1 milk corporation for sale to consumers as fluid milk and milk in manufactured products. In 1932, 42 percent of milk sold at wholesale in the District of Columbia and Baltimore milksheds flowed through this corporate bottleneck; 33 percent of the South Atlantic producer sales of milk was channeled through this same bottleneck; and 25 percent of Alabama's wholesale supply. Twenty percent of the milk in Ohio and Michigan flowed the same way and 18 percent of the milk in the North Atlantic States passed through the same channel. This company in 1935 had total net sales of 290 million dollars.

Milk bottleneck No. 2, the second largest dairy company in the United States, sold 230 million dollars worth of milk and milk products in 1935. Like No. 1 milk corporation, No. 2 got large by buying up other companies. From 1928 to 1932 this company purchased 207 separate companies, 186 in the United States and 21 in foreign countries.

Two companies, however, do not tell the whole story. Federal Trade Commission experts looking for bottlenecks examined the whole dairy industry. Surprising fact uncovered was that after the two largest milk companies, the largest buyers and sellers of milk were meat packers. Two meat packers are among the first 5 milk processors in America. In the order of the amount of milk they use, the 2 largest dairy companies rank first and second; then come 2 meat packers ranking third and fourth, with a creamery company ranking No. 5. Together these 5 companies purchased 29 percent of the total commercial milk in the United States in 1934.

Control of sales of fluid milk is still relatively weak for the whole country, though a low average for the entire country may mean startlingly high control of particular areas. One-sixth of the 30 billion pounds of fluid milk used in 1934 passed through 3 large dairy companies. Gauge readings climb higher when we get to butter. One-third of all American butter came to market through channels dominated by 6 companies—3 large butter manufacturers, and 3 meat packers. More than one-half of the condensed and evaporated milk passed through 6 companies—3 large evaporated milk companies and 3 meat packers—to get to market. Of cheese the Federal Trade Commission says: "Three large companies could act together and set the price of cheese in this country." Four-fifths of all the cheese sold in this country must slip through the narrow commercial passageway afforded by the 6 largest companies selling cheese, 3 of them dairy companies and 3 meat packers.

Channels of distribution are what the Federal Trade Commission economists call the paths commodities follow on their way from farmer to consumer. Working toward both ends from the middle, Federal Trade Commission experts found out that 6 meat packers and 12 dairy companies purchased from farmers 10½ billion pounds of fluid milk in 1934—about one-third of all fluid milk that got into commerce. Of this, 45 percent was purchased from farmers through farmers' cooperatives, 54 percent was purchased directly from the farmers themselves.

Going in the other direction the Commission learned that 64 percent of the milk handled by a selected group of corporations was sold to consumers and independent collectors, 15 percent went to processors, 7 percent to wholesale grocers, 6 percent to other distributors, and 5 percent to chain stores.

Butter figures shape up rather differently. Eleven dairy companies and 10 meat packers sold 796 million pounds of butter in 1934—almost half the total production. Chief source of supply was from small butter processors, independent creameries; 47 percent of all butter passed that way. Next most important source for the supply of butter was the farmers' cooperatives; 24 percent of the butter came this way. Then in order came: from brokers, 18 percent and from wholesalers, 10 percent.

Most butter on leaving the warehouses of selected companies either went directly to consumers or to independent retailers who then sold the butter to consumers. This accounted for 55 percent of sales; next in importance were the chain stores which took 16 percent. Wholesalers and brokers took the rest.

Cheese supplies for 8 milk companies and 10 meat packers came in greatest quantity from assemblers, companies that bought cheese from small cheese plants and then resold it to the 18 companies. Forty-five percent of milk reached the 18 companies this way: 41 percent of the cheese supplies for these companies were purchased directly from processors, and 13 percent from cooperatives. Sixty-one percent of cheese moving to market went to independent retail stores and consumers, 12 percent to chain stores, and the remainder to other companies for resale.

Condensed and evaporated milk followed a path distinct from any of those traced. Ninety-nine percent of all the canned milk purchased by 3 dairy companies and 4 meat packers came from processing companies. Chief outlet for canned milk was through wholesale grocery companies. Forty-five percent of the sales of 6 dairy companies and 3 cooperative condenseries went that way; 11 percent went to chain stores; 28 percent to retail and to consumers. About 5 percent was sold to Government agencies, State, city, county, and Federal.

Some chain store systems manufacture their own condensed milk and sell that and other brands. Six chain store companies, the Commission estimates, sold 22 percent of all the canned milk in 1934. One chain sold more than 15 percent of the canned milk sold in 1934.

Squirrels run in a wire treadmill, never get anywhere, yet seem to be perfectly happy. But corporations don't go bargaining all over the country for milk companies just to be going places and killing time; they are in search of profits. Whether or not they have been successful rests upon the interpretation of these and other figures. Federal Trade Commission experts estimate that the annual average return on the stockholders' investment in 10 milk processing and distributing companies was 10.25 percent for the years from 1929 to 1934. Worst year was 1933 when profits slumped down to 4 percent on the stockholders' investment; best year was 1929 when profits soared to 17 percent on the stockholders' investment.

Comparing the incomes of the milk distributors and processors with the incomes of other economic groups is a good way to measure their relative economic power. By this test milk distributors came off fairly well. Letting 1929 income figures stand for 100 percent, distributors' sales climbed up to 111 in 1930, then fell off to 94 in 1931, slipped further to 72 in 1932, hit bottom with 65 in 1933, and then came back in 1934 to 75.

Farmers, not so fortunate, began with their gross incomes from the production of milk at 100 in 1929, saw them fall to 87 in 1930 when distributors' incomes went up, watched them drop further to 69 in 1931, hit bottom with a thud at 54 in 1932, hold there for 1933, and then recover to 63 in 1934.

Chain stores and wholesale grocers did better than farmers in every year, but compared with the milk companies, made more in bad years, less in good years.

Consumers' dollars in the end pay for both processors' and farmers' shares. Looking at the fluid milk dollar the Federal Trade Commission discovered that in 1934 when the average price of milk per quart in 51 cities was 11.04 cents, 5.83 cents went to the producer, 5.21 cents went to the processor for his services. Here then 53 cents of the consumer's dollar went to the producer to pay for the cost of producing the milk and transporting it to the distributor's plant while 47 cents went to the distributor for processing, bottling, and distributing the milk.

Butter dollars in 1934 were distributed three ways: 25.6 cents to the distributor, 15.8 cents to the processor, and 58.6 cents to the producer. Average retail price for butter in 51 cities in 1934 was 31.5 cents a pound. On this basis, producers got 18.45 cents, processors 5 cents, and distributors, 8.05 cents.

Chain store sales of butter were studied in two instances for the same period, and though they are not comparable with the above analysis, they are interesting. Average price of butter per pound was 27.68 cents. Of this 2.44 cents went to the distributors, 6.79 cents to the processor, and 18.45 cents to the producer. On a butter dollar basis, this means that for this chain store butter, producers got 67 cents of the consumer's butter dollar; processors got 24 cents; and distributors 9 cents.

Arithmetic books used to carry a dozen or so pages of answers to problems posed. Good economic studies should also have answers after all the problems are set forth. Prop-

erly the Federal Trade Commission not only poses problems; it also draws conclusions and makes recommendations.

Concludes the Federal Trade Commission: The price of cheese, which is a considerable factor in the price of milk, is not determined competitively.

Dairy products concerns sometimes use corporate control of a market to depress fluid milk prices to farmers. "Such practices," the Commission adds, "are detrimental to the interests of dairy farmers and are inimical to the interests of the consuming public."

Secret rebates and special discounts have been granted by the large milk distributors to favored customers, particularly chain stores.

To Congress, and producers, the Commission says: "It is believed that conditions . . . can be improved without additional legislation . . . if producers take full advantage of existing Federal and State Laws authorizing the organization of cooperative associations to market farm products."

Prevent distributors from creating surpluses and depressing milk prices, the Commission recommends to farmers, by giving "careful consideration to the plan of organizing inter-marketing area agencies to handle interstate and inter-milkshed sales of milk and cream."

Use written contracts, it advises cooperatives. States should require milk distributors to make complete reports of their activities, and the Federal Government should require distributors who engage in interstate commerce to make similar complete reports.

Purchase of milk companies by other milk companies could be corrected by amending the Clayton Anti-Trust Law.

Federal support should be given to compacts between States to secure uniform laws in regard to milk.

AN OUNCE OF PREVENTION

[Concluded from page 9]

second consists of 2 pounds, 1⅓ ounces of diammonium phosphate mixed with a gallon of water, while the third can be made just as easily by dissolving 12½ ounces each of ammonium sulphate and diammonium phosphate in a gallon of water. When fertilizer-grade ammonium phosphate is used, the solution should be strained to remove dirt and debris. Chemists also recommend that in the first of these three solutions, enough household ammonia be added so that its presence can be detected by its odor. The ammonia neutralizes any free acid and temporarily prevents deterioration of the solution through escape of the acid.

For the usual household purposes there is nothing better than the boric acid-borax mixture. Not only does this formula fireproof the materials to which it is applied, it is a double check against deterioration of curtains and other fabrics exposed to invisible acidic gases in the air. No fabric escapes the destructive sulphuric acid contained in the gases; the acid is the death knell for cotton and silk alike. It shows no favorites. Research chemists in the Bureau of Chemistry and Soils of the Department of Agriculture conducted extensive tests on fabrics treated with the borate solution and emerged with another boost for the fireproofing method. They discovered that the action of the acidic sulphur gases was almost completely checked for a considerable period of time by the borate treatment. And to top off their revelations, they announced that the borate treatment has no effect whatsoever on the appearance of the fireproofed fabrics.

Other arguments in favor of the borate solution method stand out. The Bureau of Chemistry and Soils has outlined in a bulletin* the qualities of a desirable fireproofing treatment, all of which are met by the boric acid-borax mixture. The treatments should be easy to apply, should require little equipment, and should use easily obtainable materials. If the amount of the agent required weighs more than 40 percent of the weight of the fabric or other material to be fireproofed, it is not a desirable fireproofing agent. In fact, the Bureau recommends that the agent should not exceed by more than 20 percent the weight of the material to be fireproofed.

Finally, this Bureau lays down 5 essential rules for using any type of fireproofing method: (1) the fireproofing material should not shorten the life of the article on which it is used; (2) it should exert little or no effect on the appearance and feel of the article treated; (3) it should have no effect on color; (4) it should be stable, noncorrosive, noncaustic and non-poisonous; and (5) it should not take up water, should adhere well, should be cheap and should impart satisfactory fire resistance.

There is but a single failing chalked up against the virtues of fireproofing: No fireproofing agent will prevent a fabric from being charred and showing the effects of burning. But one which is applied correctly will halt the blaze and prevent the flames from spreading. That is the fundamental purpose of fireproofing for safety and for eliminating fire hazards. The wise housewife knows she is protecting her home and her family when she takes these preventive steps against the ever present danger of fire and disaster.

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*"*Fireproofing Fabrics*," *Farmers Bulletin No. 1786. Priced at five cents and for sale by the Superintendent of Documents, Washington, D. C.*

BREAD BASKET PROBLEMS

[Continued from page 6]

vators in order to secure freight business. Through owning the elevators where grain was stored, railroads assured themselves of the privilege of hauling the grain when it was finally delivered to mills. Today, however, most of the elevators built by railroads have been leased to large handlers of grain, though elevators in export points are still retained by the railroad companies. Such leases are frequently at rentals much below the actual cost to the railroad companies of maintaining the elevators.

One effect of such a practice is to add to railroad charges a cost which should be legitimately charged against the marketing of grain. A more important effect is the fact that large shippers of grain tend to be favored over small shippers of grain. Operators leasing railroad-owned elevators can undersell independent grain dealers. Too, the practice of leasing elevators at rentals below their actual cost, discourages the building of other elevators and thus reduces competition.

In some of the more important grain markets the available storage capacity is controlled by a small number of grain men. Theoretically grain storage is available to the public as well as to the owners of these elevators, but prices for storage to non-owners make the use of the elevators impossible in many cases.

An example of what can happen when warehouse operators are permitted to store grain they own in bins where publicly owned grain is stored: Suppose there are one thousand bushels of publicly owned No. 2 grain stored in the bins of a particular warehouse. Now within each grade, quality ranges from the top of the grade to the bottom of the grade. If the No. 2 grain is of high quality then the warehouse owner might mix with the thousand bushels of No. 2 grain 200 bushels of No. 3 grain that belongs to him and thus obtain 1200 bushels of low grade No. 2 grain. By this process he has transformed 200 bushels of No. 3 grain into 200 bushels of No. 2 grain, has profited to the extent of the difference in price between No. 2 and No. 3 grain at the expense of the owners of the grain that is stored in his warehouse.

Once before the Federal Trade Commission investigated the grain markets, then it recommended that grain dealers who did not operate elevators should be enabled by practical measures to store grain in public elevators. Or that railroads might be required to operate their elevators for their shippers. If these suggestions did not work, it was recommended then that the State or Federal Government should build and operate public elevators in the public interest.

Today the Federal Trade Commission says, "After the lapse of many years there has been little or no improvement in the situations which led to the foregoing recommendations."

To bring these recommendations up to date, it now adds, however, that all deliveries of grain should be made from warehouses licensed by Federal Authority, subject to Federal Control. Nor should these elevators be "owned, operated, or controlled, directly or indirectly, by any person, firm, or other organization, directly or indirectly, dealing in grain." All deliveries of grain on futures contracts should, in the opinion of the Commission, be subjected to Federal grading and inspection. Storage charges for grain in public warehouses should be regulated by the Federal Authority. Futures contracts for the delivery of grain under the Federal Trade Commission recommendations could be satisfied by the delivery of grain at places other than Chicago as well as in Chicago. Railroads would themselves be required to operate their elevators at rates fixed by the Interstate Commerce Commission. Brokers and other persons who buy and sell grain for the accounts of other persons would be prohibited from buying and selling grain for their own account. Then, says the Federal Trade Commission, "If these recommendations do not prove sufficient, the only alternative would appear to be to operate all elevator capacity by public authority." On existing laws, comments the Federal Trade Commission, "A careful examination of the Commodities Exchange Act indicates that its provisions do not reach to the heart of some of the chief problems existing in the grain trade."

(To be continued in our next issue)

FISH ON YOUR DIET

[Continued from page 13]

Independent boat owners are in the best position to join cooperatives; others cannot well use the cooperative method. "Independent" fishermen are those who operate their own boats, nets, and other gear. "Dependent" fishermen are those who operate craft and gear belonging to wholesale dealers, canners, or others.

Unlike farm cooperatives, the fishermen's cooperative associations have received scant attention from the Government. No money is available for loans to them except in the case of oyster planters who have received some loans from the Farm Credit Administration. A proposed Fishery Credit Act, on which hearings were held at the last session of Congress, would make available some $5,000,000 as working capital for cooperative associations. Only form of recognition fishermen's co-ops have had is the Act of 1935 "authorizing associations of producers of aquatic products," which gave Federal authorization to fishermen's cooperative marketing enterprises engaged in in-

terstate and foreign commerce. This law is comparable to the Capper-Volstead Act of 1922 by which Congress gave Federal authorization to farm producers to associate and market their products.

In the spacious new Department of Commerce building in Washington, sightseers and Government employees crowd about the 53 aquaria and pools which give tangible and arresting evidence of the work of the U. S. Bureau of Fisheries.

The Bureau, which is part of the Commerce Department, is charged with the conservation, under Federal laws and international treaties, of our existing supply of fish and shellfish. Thus it regulates Alaska salmon fisheries; distributes billions of eggs and fish from Federal hatcheries for food and game fishing; collects statistics of the fisheries industry; studies marketing problems; investigates pollution of fresh water streams; carries on research in the preservation of fishery products, the nutritive value of fish for human food and animal and poultry feed, and methods of preparing fish and shellfish for the table.

Protecting purity of fish and shellfish — fresh or processed — shipped across State lines is a responsibility of the Food and Drug Administration, under its general mandate to stop the interstate shipment of adulterated or misbranded food products. See "On Guard for Consumers" in the CONSUMERS' GUIDE for November 29, 1937.

Local public health ordinances and State laws of greatly varying degrees of effectiveness govern the marketing of fish and shellfish within local communities.

Purity of oyster beds is guarded by special regulations administered by the United States Public Health Service.

Fish meals and oil sold as animal or poultry feed are subject to commercial feedstuffs inspection by the various States.

No Federal fish inspection exists comparable to the Federal inspection of meat in slaughterhouses, packing houses, and canning establishments by the Bureau of Animal Industry. For canned fish and sea food, inspection is possible, on a purely voluntary basis. The Sea Food amendment to the Federal Food and Drugs Act, sponsored by shrimp canners in 1934 to revive declining consumer confidence and sales, allows canners to secure Federal inspectors to supervise packing operations and insure a sanitary product. Practically all shrimp canners now have inspectors on their boats and in their canneries. Inspected products are labeled "Production Supervised by U. S. Food and Drug Administration." As yet, no packers of other sea foods have asked for such Federal inspection. See "What Kind of Safeguards?" in CONSUMERS' GUIDE, April 19, 1937, pp. 16–17, for details of this service.

There are no Federal quality grades for canned fish such as the grades for canned fruits and vegetables administered by the Bureau of Agricultural Economics.

Proposals for grading of fish were made by fisheries technologists, designedly in the interests of fishermen and consumers and the industry as a whole, at the NRA hearings on the fisheries code, but did not secure acceptance. The States of Minnesota and Virginia require grading of certain fisheries products sold within their borders. Consumer groups in other States who wish information on buying fish by grade may write to the Director of the State Division of Markets, Richmond, Virginia; or the State Department of Markets, St. Paul, Minnesota.

STUDY QUESTIONS FOR THIS ISSUE

1. Why has the Food and Drug Administration defined minimum ingredients for mayonnaise but not for salad dressing?
2. How important to farmers is the production of wheat?
3. What are the principal kinds of wheat and what are the major uses of the flour that comes from each kind?
4. How did the opportunity for speculation in the sale of wheat develop?
5. What does "hedging" mean and what is the economic reason for it?
6. What curb to trading in grain does the Federal Trade Commission suggest?
7. What changes in the ownership of elevators does the Federal Trade Commission suggest?
8. How can you make a simple fireproofing solution for fabrics?
9. How should it be applied to be effective?
10. What kinds of household objects should be fireproofed with such a solution?
11. What food values are provided by fish?
12. What pointers have you learned for use in selecting fresh fish?
13. What are some of the reasons why fishermen are in a weak economic position?
14. How are fishermen trying to strengthen their position?
15. What kinds of legal protections exist to protect consumers against impure fish and fish products?
16. How important is the No. 1 milk corporation in the purchase of milk from farmers, according to the Federal Trade Commission?
17. How important, according to the same source, is this company in the sale of ice cream and cheese?
18. How many companies, is it claimed, purchase about one-third of all the fluid milk sold by farmers?
19. How did the average returns on investments in 10 milk companies compare during the depression with incomes of dairy farmers as a whole?
20. Where did the consumers' fluid milk dollar go in 1934?
21. What are 3 of the suggestions the Federal Trade Commission makes on curing some of the problems of milk distribution?

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